

### **BACKFILLING AND GRADING**

Spoil handling on the mine site will be accomplished with bulldozers, loaders and rock trucks. Initial mining activities will begin with a small contour cut south of Cross-Section A-A' just west of Cross-Section C-C' on Increment #1 in the Marker seam. The spoil material generated from the initial cut will be placed on the existing bench in Bench Storage Area #1, south of Cross-Section A-A' and just west of Cross-Section D-D'. A portion of this material will be temporarily placed on the existing Marker bench in Bench Storage Area #1 until enough working room has been established in the contour cuts being mined on Increment #1. A good portion of the initial cut material will then be hauled back to the contour cuts to reclaim the walls created on increment #1, with the remainder being intermingled with the spoil generated from the Area Mining, Point #1 that will take place on Increment #2. After the extent of Increment #1 is completely mined, mining will then proceed to the Area Mining portion, Point #1. This will begin on the Point #1, pit 6 and the material generated from this will be used to reclaim the remainder of walls on Increment #1, just west of Cross-Section D-D'. The Area Mining of the mountain near Cross-Section E-E' will continue in a westerly direction to pit 15 west of Cross-Section D-D' and the extent of Increment #2, with spoil being used to reclaim the previous pits which includes the prelaw Marker wall on all sides. A contour cut will then begin on Increment #3 just east of Cross-Section C-C' at the most easterly portion of the permit boundary with spoil generated from these cuts being used to reclaim the prelaw marker bench on Bench Storage Area #2, downslope of the contour cut. After the initial cuts are taken on Increment #3 mining will continue in a south westerly direction on Increment 3 with the material generated being used to reclaim previous pits in both the Contour Area, Area Mining Area and the prelaw wall on the Marker Seam. The regrade will be to the approximate original contour as required under 4VAC25-130-816.102(a)(1).

### **Contour Mining**

Compliance with time and distance requirements will be straight forward. There will be no more than 1350 feet of highwall exposed at any given time. The 1350 feet of highwall exposed at any time will be the worst case on all increments as detailed on the Mining Sequence Map found in Attachment 21.2 and the summary found below. Rough backfilling and grading of any highwall will follow coal removal not more than 60 days.

### **Area Mining**

Rough backfilling and grading shall be completed within 180 days following coal removal and shall not be more than three ridge slices behind the pit being worked.

Stabilization of regraded spoil will be accomplished by grading with dozers in a direction perpendicular to the highwall prior to redistribution of topsoil/alternate topsoil material. Traffic of rubber-tired equipment will be kept to a minimum in order to prevent excess compaction.

A 20% swell factor was used to calculate volumes available for regrading and for excess spoil storage requirements. There can be variability involved in making such an estimate and the actual swell may be higher or lower than estimated.

### **Contemporaneous Justification**

Mining on **Increment #1** will begin in pits 1 through 5 with the initial material for pits 1 through 3 being hauled and placed on the existing Marker Bench in Bench Storage Area #1. The material generated from pits 3 through 5 will be hauled and used to reclaim pits 1 through 3. The worst case for **Increment #1** would be approximately **900'** of open highwall at any one time.

Mining on **Increment #2** will begin in pits 6 through 15 with the material from pit 6 being hauled to reclaim pits 4 and 5. Once pit 6 is finished, mining will continue in pit 7 through 15 with the material generated from these pits being dozer pushed to reclaim the previous pits and the existing prelaw marker wall located on all sides of the Area Mining, Point #1. The worst case for **Increment #2** would be approximately **1000'** of open wall and 3 **open** pits at any one time.

Mining on **Increment #3** will begin in pit 16 through 28. The material generated from pit 16 through 18 will be hauled to reclaim pit 15 and the remainder of the open area on pits 13 and 14. After pit 16 through 18 are finished, mining will continue to pits 19 through 21 with this material being dozer pushed and hauled to reclaim the contour cuts on 16 through 18 and the Bench Storage Area #2 located downslope of these pits. After pit 19 through 21 are finished, mining will continue in pit 22 with this material being hauled to reclaim pits 19 and 20 and the remainder of area on the Existing Marker Bench in Bench Storage Area #2. After pit 22 is finished, mining will continue in pit 23 with this material being dozer pushed and hauled to reclaim pits 21 and 22. After pit 23 is finished, mining will continue in pit 24 through 26 with this material being dozer pushed and hauled to reclaim pits 23 and a portion of 24 and 25. After pits 24 through 26 are finished, mining will continue in pit 27 and 28 with the material being dozer pushed to reclaim the remainder of pits 24, 25, 27 and 28.

If any additional material is needed to eliminate walls, the material stored on the z e existing bench will be used. The worst cast for **Increment #3** would be approximately **1350'** of open highwall at any one time. The 1350' allows for a 15% road to the top of the highest cut taken on this increment.

Below are the distances upon each increment's worst case is based. See Mining Sequence/Worst Case map provided in Item 21.2.

Increment #1 – 900' open wall  
Increment #2 – 1000' open wall  
Increment #3 – 1,350' open wall